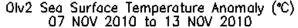
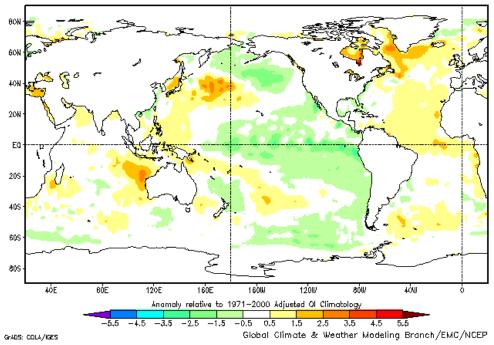
Central Region December 2010 & Meteorological Winter 2010-2011 Climate Summary

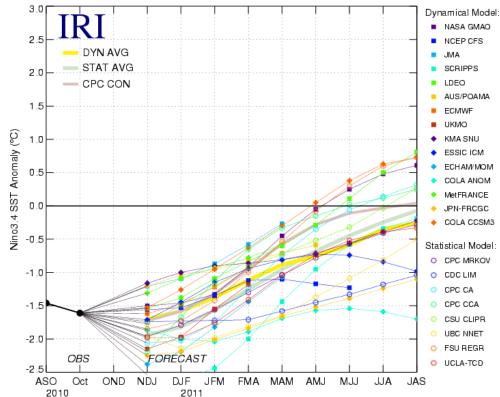




Both the sea surface temperatures and sub-surface thermocline across the equatorial Pacific continue to show that a strong La Niña pattern continues. In fact, the latest SST departure in the Nino 3.4 region remained around - 1.5C.

However, the dynamical and statistical models suggest that while this La Niña will persist through the Northern Hemispheric Winter of 2010-11, the La Nina should begin to weaken. Regardless, the CPC monthly and seasonal forecasts generally followed the La Niña composites through the spring of 2011.

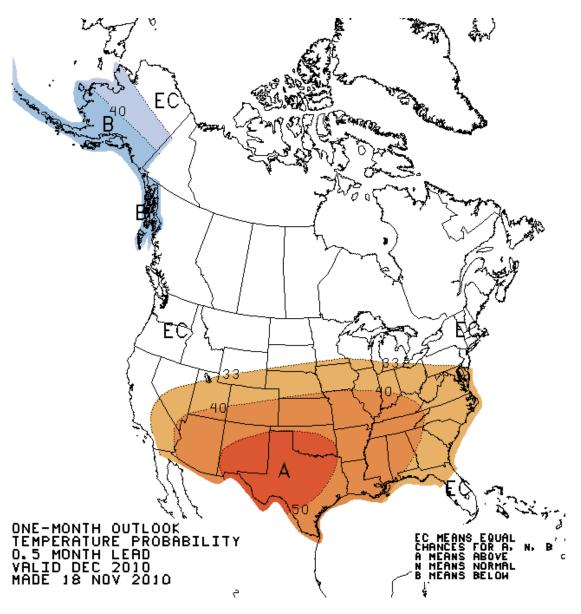
Model Predictions of ENSO from Nov 2010



December 2010 CPC Climate Outlooks

Temperature

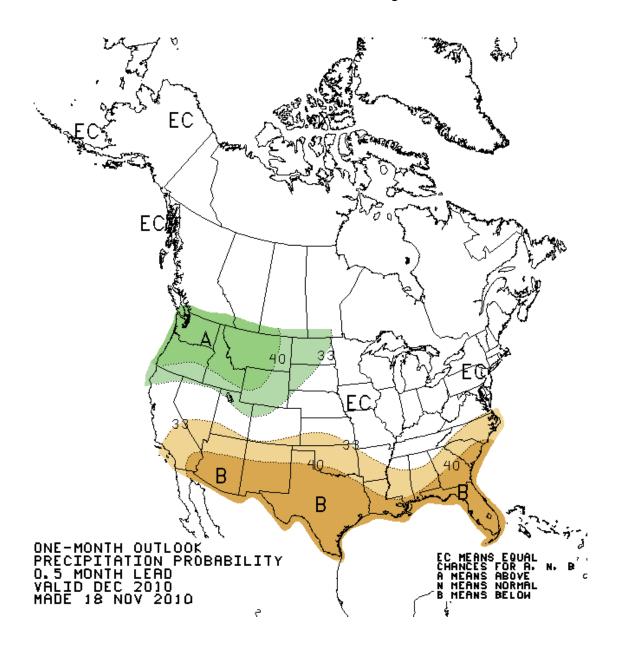
Higher probabilities of uncommonly warm temperatures are forecast for most of Central Region. Chances are unknown or indeterminate for northern Wyoming, North Dakota, and most of South Dakota, Minnesota, Wisconsin and Michigan.



December 2010 CPC Climate Outlooks

Precipitation

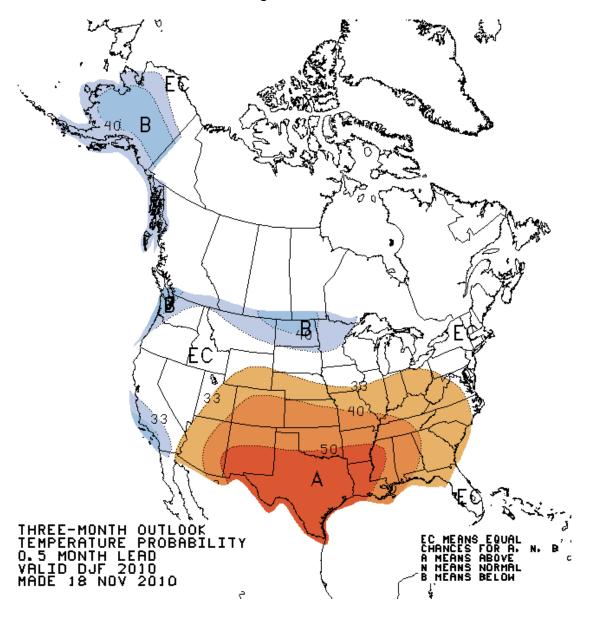
Probabilities lean into the uncommonly wet range for North Dakota, western South Dakota and Wyoming. For southern Kansas, probabilities are slightly in the uncommonly dry category. Chances are unknown or indeterminate for the rest of Central Region.



December 2010 - February 2011 CPC Outlooks

Temperature

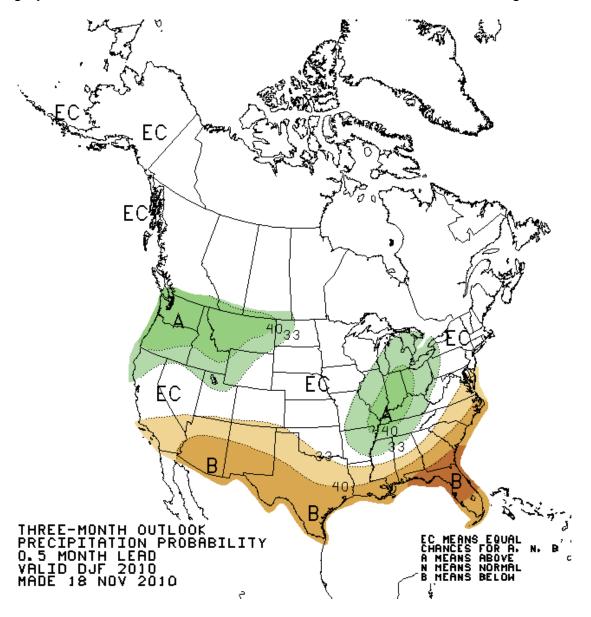
The chances for uncommonly warm temperatures are best across southern Wyoming, Colorado, Nebraska, Kansas, far southern Iowa, Missouri, and most of Illinois and Indiana. Uncommonly cold readings are favored across North Dakota and northern Minnesota. Chances are unknown or indeterminate for the rest of Central Region.



December 2010 - February 2011 CPC Outlooks

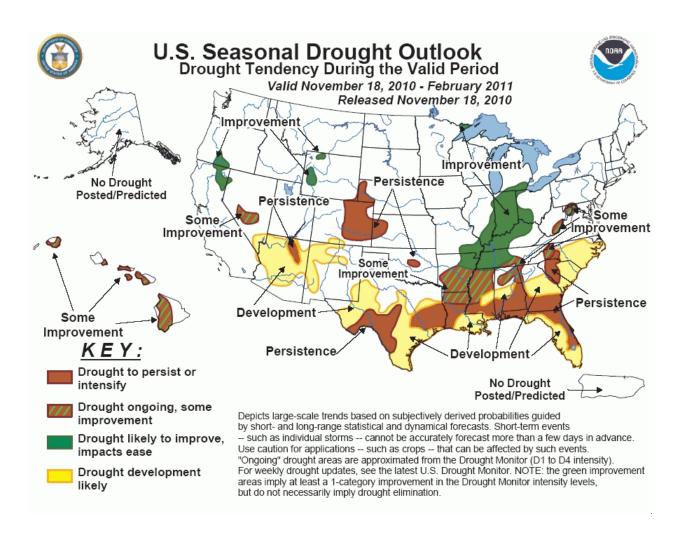
Precipitation

The best chances for uncommonly wet conditions are across Michigan, Indiana, Illinois, Kentucky and much of Missouri. A second area extends across western North Dakota and western Wyoming. A small area of far southern Colorado indicates that probabilities lean into the uncommonly dry category. Chances are unknown or indeterminate for the rest of Central Region.



Seasonal Drought Outlook: November 2010 - Februrary 2011

CPC is forecasting continued improvement in the drought situation for southern Michigan, Indiana, southern Illinois, southeast Missouri and western Kentucky. A second area of improvement is noted in parts of western Wyoming and the arrowhead of Minnesota. Drought will persist over the Nebraska Panhandle, eastern Colorado and west-central Kansas. A small area of south-central Colorado will likely see development of drought.



Seasonal Outlook Interpretation Guide

The National Weather ServiceSeasonal Climate Outlooks predict the <u>probability</u> of conditions being among the warmest/coldest or wettest/driest (Table 1) terciles of years compared to the period of 1971-2000.

The outlooks indicate probability of being in three specific categories in reference to the 30-year climatology from 1971-2000 (Table 2). Remember, CPC outlooks are made at the scale of climate megadivisions (Fig. 1).

Table 1...Social Science vs. Climate Science Terminology

Temperature		Precipitation	
Social Science	Climate Science	Social Science	Climate Science
Uncommonly Cold	Below Normal	Uncommonly Wet	Above Normal
	Tercile		Tercile
Uncommonly Warm	Above Normal	Uncommonly Dry	Below Normal
	Tercile		Tercile
Moderate	Normal Tercile	Moderate	Normal Tercile
(Neither Warm Nor Cold)		(Neither Wet nor Dry)	

Table 2...Climate Science Statistical Terminology (Terciles)

Precip	Temp	Probal	Probability of Occurence		
		<u>Above</u>	<u>Near</u>	<u>Below</u>	category
		80.0%-90.0% 70.0%-80.0% 60.0%-70.0% 50.0%-60.0% 40.0%-50.0% 33.3%-40.0%	16.7%-06.7% 26.7%-16.7% 33.3%-26.7% 33.3% 33.3% 33.3% 33.3%	03.3% 03.3% 06.7%-03.3% 16.7%-06.7% 26.7%-16.7% 33.3%-26.7%	"Above" "Above"
		33.3%-30.0% 30.0%-25.0%	33.3%-40.0% 40.0%-50.0%	33.3%-30.0% 30.0%-25.0%	
		33.3%-26.7% 26.7%-16.7% 16.7%-06.7% 06.7%-03.3% 03.3% 03.3%	33.3% 33.3% 33.3% 33.3%-26.7% 26.7%-16.7% 16.7%-06.7%	33.3%-40.0% 40.0%-50.0% 50.0%-60.0% 60.0%-70.0% 70.0%-80.0% 80.0%-90.0%	"Below" "Below" "Below" "Below"
		33.3%	33.3%	33.3%	"Equal Chances"

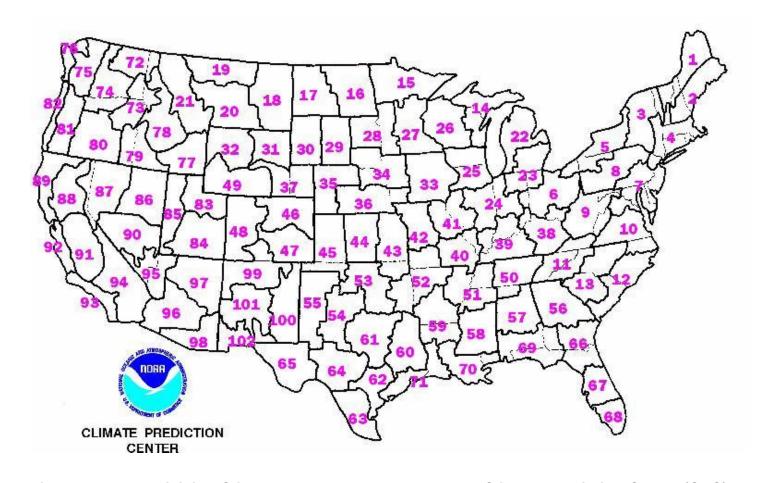


Figure 1...Mega Division Climate Forecast Map used by the Climate Prediction Center (CPC)

Reference Materials

CPC ENSO Box & Whisker Analysis:

http://www.cpc.ncep.noaa.gov/products/precip/CWlink/ENSO/box_whiskers/index.php

El Nino and La Niña-Related Winter Features over North America:

http://www.cpc.ncep.noaa.gov/products/precip/CWlink/ENSO/composites/EC_LNT_index.shtml

Winter Composites:

http://www.cpc.noaa.gov/products/analysis_monitoring/ensocycle/nawinter.shtml